

REMARKS

This is in full and timely response to the Official Action mailed August 15, 2006.
Reconsideration and reexamination are respectfully considered.

Claims

Claims 1-7 are pending in the application. By this Amendment, claim 9 and 10 are canceled without prejudice or disclaimer, claim 1 and 4 are amended.

Rejections

Claims 1 -7, 9 and 10 are rejected under 35 U.S.C. 103(a) as unpatentable over Sato et al. (U.S. Patent No. 5,657,531) in view of Akiyama et al. (U.S. Patent No. 5,646,802).
The rejection is respectfully traversed.

Sato discloses a magnetic head arm, method of producing the same and apparatus for producing the same. A mounting portion, i.e., a protruding portion provided with a through hole, of a magnetic head assembly is fitted into an insertion hole formed at the forward end of a carriage arm, and a thus-produced inlay portion is disposed between adjacent first members having a V-shaped slit. A second member is pushed into the V-shaped slit of each first member and the magnetic head assembly is pressed against the carriage arm by the expanding force of the slit portions of each first member which is produced in proportion to the amount of insertion of the second member, and the magnetic head assembly is held in a fixed state. In this state, a caulking ball is press-fitted into the through hole of the protruding portion with a caulking pin so as to caulk the inlay portion. The magnetic head assembly is pressed against the carriage arm perpendicularly thereto.

Akiyama discloses a reduced height disk drive that includes a suspension-actuator assembly in which a head suspension is attached to an actuator on the same side of the head suspension as a transducer head is attached to the head suspension for writing and reading information on and from a disk. A spin motor cable is located on the outside of a housing and connected to pins extending from the housing through pins extending from the housing and lines contained in the housing. A printed circuit board having a through hole in which a connector is provided connects to pins extending from the housing. A flexible printed circuit inside the housing has a connector for connecting to the pins and at one end and a fixing

member for mechanically attaching to the pins at the other end. The flexible printed circuit is attached to the pins in a folded condition.

Claim 1, as amended, is directed to a head actuator that adapted for use with a hard disk apparatus operative to rotate a disk that includes an arm having a rotary drive section and including an arm pivot portion and an arm tip portion disposed apart from the arm pivot portion, with the arm extending generally longitudinally, two plate shaped elastic members attached towards the arm tip portion of the arm with a gap between each other with each elastic member extending generally longitudinally, a magnetic head supported at a tip end portion of each of the elastic members, a boss on the other end of each of the elastic members that protrudes in the direction of the side on which the magnetic head is provided and a fixing section, which has a hole into which the bosses are inserted, formed on the arm tip portion of the arm. Claim 1 recites the the boss of one of the elastic members is inserted into the hole from one end section thereof, and the boss of the other elastic member is inserted into the hole from the other end section thereof so as to have the fixing section held and fixed between the elastic members and the elastic members are attached to the arm at an obtuse angle on the arm tip portion with respect to the direction in which the arm extends to form a generally L-shaped configuration. Claim 1 for the recites that, when the rotary drive section pivots the arm at the arm pivot portion, the arm, the elastic members and the magnetic heads pivot about a pivot axis in a manner that, in an operative state, forward portions of the elastic members and magnetic heads move to and between an outer periphery of the disk and a radially inner portion of the disk with the disk positioned in the gap between the magnet heads while the arm, the fixing section, the bosses and rearward portions of the elastic members remain outside of the outer periphery of the disk and, in a non-operative state, the elastic members, the magnet heads, the fixing section, the bosses and the arm are positioned outside the outer periphery of the disk.

It is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests the features of claim 1 as amended. Specifically, it is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests that, when the rotary drive section pivots the arm at the arm pivot portion, the arm, the elastic members and the magnetic heads pivot about a pivot axis in a manner that, in an operative state, forward portions of the elastic members and magnetic heads move to and between an outer periphery of the disk and a radially inner portion of the disk with the disk positioned in the

gap between the magnet heads while the arm, the fixing section, the bosses and rearward portions of the elastic members remain outside of the outer periphery of the disk and, in a

non-operative state, the elastic members, the magnet heads, the fixing section, the bosses and the arm are positioned outside the outer periphery of the disk

Claim 4, as amended, is directed to a hard disk apparatus operative to rotate a disk that includes a head actuator in which two plate shaped elastic members are attached, with a gap between themselves, towards the tip of an arm having a rotary section and including an arm pivot portion and an arm tip portion disposed apart from the arm pivot portion, the arm extending generally longitudinally, a magnetic head is attached to the tip of each of the elastic members, and the magnetic heads are positioned on both sides of a disk, a boss provided on the other end of each of the elastic members that protrudes in the direction of the side on which the magnetic head is provided and a fixing section, which has a hole into which the bosses are inserted, formed towards the arm tip portion of the arm. Claim 4 recites that the boss of one of the elastic members is inserted into the hole from one end section thereof, and the boss of the other elastic member is inserted into the hole from the other end section thereof so as to have the fixing section held and fixed between the elastic members and the head actuator has a shape in which the elastic members are attached to the arm at the arm tip portion at an obtuse angle with respect to the direction in which the arm extends so that the elastic members are inclined towards the disk to form a generally L-shaped configuration. Claim 4 recites that, when the rotary drive section pivots the arm at the arm pivot portion, the arm, the elastic members and the magnetic heads pivot about a pivot axis in a manner that, in an operative state, forward portions of the elastic members and the magnetic heads move to and between an outer periphery of the disk and a radially inner portion of the disk with the disk positioned in the gap between the magnet heads while the arm, the fixing section, the bosses and rearward portions of the elastic members remain outside of the outer periphery of the disk and, in a non-operative state, the elastic members, the magnet heads, the fixing section, the bosses and the arm are positioned outside the outer periphery of the disk.

It is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests the features of claim 4 as amended. Specifically, it is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests that, when the rotary drive section pivots the arm at the arm pivot portion, the arm, the elastic members and the magnetic heads pivot about a pivot axis in a manner that, in an operative state,

forward portions of the elastic members and magnetic heads move to and between an outer periphery of the disk and a radially inner portion of the disk with the disk positioned in the gap between the magnet heads while the arm, the fixing section, the bosses and rearward

portions of the elastic members remain outside of the outer periphery of the disk and, in a non-operative state, the elastic members, the magnet heads, the fixing section, the bosses and the arm are positioned outside the outer periphery of the disk.

It is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests the features of claims 1 and 4 as amended. Specifically, it is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests that, when the rotary drive section pivots the arm at the arm pivot portion, the arm, the elastic members and the magnetic heads pivot about a pivot axis in a manner that, in an operative state, forward portions of the elastic members and magnetic heads move to and between an outer periphery of the disk and a radially inner portion of the disk with the disk positioned in the gap between the magnet heads while the arm, the fixing section, the bosses and rearward portions of the elastic members remain outside of the outer periphery of the disk and, in a non-operative state, the elastic members, the magnet heads, the fixing section, the bosses and the arm are positioned outside the outer periphery of the disk. Thus, it is respectfully submitted that one of ordinary skill in the art would not be motivated to combine the features of the applied art because such combination would not result in the claimed invention. As a result, it is respectfully submitted that claims 1 and 4 are allowable over the applied art.

Claims 2 and 3 depend from claim 1 and include all of the features of claim 1. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reason claim 1 is allowable as well as for the features they recite.

Claims 5-7 depend from claim 4 and include all of the features of claim 4. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reason claim 4 is allowable as well as for the features they recite.

Withdrawal of the objection is respectfully requested.

Further, Applicants assert that there are also reasons other than those set forth above why the pending claims are patentable. Applicants hereby reserve the right to submit those other reasons and to argue for the patentability of claims not explicitly addressed herein in future papers.

In view of the foregoing, reconsideration of the application and allowance of the pending claims are respectfully requested. Should the Examiner believe anything further is

SON-2835
(80001-2835)

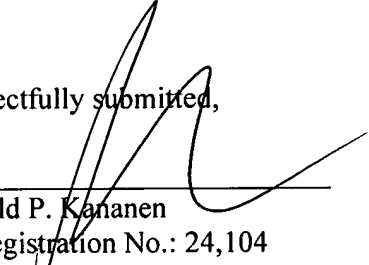
Application No.: 10/684,459

desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

Should additional fees be necessary in connection with the filing of this paper or if a Petition for Extension of Time is required for timely acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No. 18-0013 for any such fees and Applicant(s) hereby petition for such extension of time.

Dated: September 20, 2005

Respectfully submitted,

By 
Ronald P. Kananen
Registration No.: 24,104
RADER, FISHMAN & GRAUER PLLC
1233 20th Street, N.W.
Suite 501
Washington, DC 20036
(202) 955-3750
Attorney for Applicant

Enclosure(s): Amendment Transmittal

DC248572.DOC